

When a product equals zero, then one of the factors must also equal zero.

If $a \cdot b = 0$

Then either $a = 0$ or $b = 0$

Solve using the Zero Product Property.

1) $7x = 0$

2) $5(x - 3) = 0$

3) $x(x + 8) = 0$

Solve using the Zero Product Property.

$$4) (x - 9)(3x - 12) = 0$$

$$5) (3x + 2)(4x - 8) = 0$$

$$6) 4x(-3x - 6)(6x - 1) = 0$$

Factor Completely and Solve.

$$7) \quad x^2 - 5x + 6 = 0$$

$$8) \quad 2x^3 - 22x^2 + 48x = 0$$

$$9) \quad x^2 - 3x = 0$$

Factor Completely and Solve.

$$10) \quad 2x^2 + 11x = -5$$

$$11) \quad 6x^2 - 2x = 8$$

$$12) \quad -3x^2 + 14x + 7 = 6x + 11$$